

## REMARKS

Claims 1-22 are pending in the instant application. In the most recent Office Action, claims 1-22 are rejected under 35 U.S.C. § 103(a) as allegedly obvious over U.S. Patent No. 5,935,143 to Hood (hereinafter, "Hood"), in view of U.S. Patent No. 2,784,751 to Alexander (hereinafter, "Alexander"). The abstract is objected to for length and phraseology.

By the above amendment, the abstract has been revised as prescribed in the Office Action. Applicant respectfully submits that the objection to the abstract has been obviated. Favorable reconsideration and withdrawal of the objection is kindly requested.

On the merits of the claims, Applicant respectfully traverses the rejection. Independent claim 1 recites, *inter alia*, at least two stamped pieces of sheet stock which are laminated together to form a laminated ultrasonic waveguide for transferring ultrasonic acoustic energy along a longitudinal axis. Independent claim 12 recites a method of fabricating a laminated ultrasonic waveguide comprising stamping and forming at least two stamped pieces of sheet stock to form parts of the body of the laminated ultrasonic waveguide, and laminating together the at least two stamped pieces of sheet stock to form the body of the laminated ultrasonic waveguide. These features are neither taught nor suggested by Hood or Alexander, taken alone or in any combination.

Hood teaches an ultrasonic knife for surgical application, which, as admitted in the Office Action (p. 3), neither teaches nor suggests an ultrasonic waveguide having at least two stamped pieces of sheet stock that are laminated together. To the contrary, the blade (26) of Hood knife is shown in several cross-sections, each of which depict only a solid, single-piece construction. The Office Action offers Alexander as teaching, inter

alia, a laminated blade having at least two pieces of stamped sheet stock laminated together. It is alleged that it would have been obvious to combine the two references for ease of manufacture and reduction of costs.

The Office Action does not make out a *prima facie* case of obviousness for at least two reasons. The combination of Hood and Alexander is improper because the two references are non-analogous. Additionally, there is no reasonable expectation of success from the combination, as required for a *prima facie* case of obviousness. *See, In re Dow Chemical Co.*, 837 F.2d 469, 5 USPQ2d 1529 (Fed. Cir. 1988) (“The consistent criterion for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that this process should be carried out and would have a reasonable likelihood of success...”)

It is a threshold issue to any obviousness finding that the secondary references are legitimately relevant prior art. *See, In re GPAC*, 35 USPQ2d 1116, 1120 (Fed Cir 1995). To be relevant, the reference must be from the applicant’s field of endeavor, or pertinent to the problem being solved. *Id.* In this case, the applicant’s field of endeavor is laminated ultrasonic surgical waveguides fabricated from sheet stock, i.e., a surgeon’s tool. Alexander is in the field of power-driven, reciprocating saws, i.e., a tool of a carpenter. The two fields are clearly unrelated, and therefore not relevant to one another.

“A reference is reasonably pertinent if, even though it may be in a different field of endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor’s attention in considering his problem.” *Id.* In this case, the inventor’s problem was to reduce the cost and material waste in the manufacture of ultrasonic waveguides. By contrast, Alexander is directed to the manufacture of a saw

blade for a power-driven reciprocating hand saw. The blade of Alexander need not facilitate the transmission of ultrasonic energy along its axis, as a surgical waveguide must. Therefore, Alexander is not pertinent to the problem confronting the Applicant in the instant Application.

Failing both the field of endeavor and the pertinent problem tests, the Alexander reference will clearly be seen as non-analogous art. Therefore, any combination of Hood and Alexander is improper, and any rejection based on such combination poorly taken.

Further, there is no expectation of any success whatsoever in the combination of Hood and Alexander, as required. Hood, like any ultrasonic surgical instrument, requires an efficient propagation path for ultrasonic energy to reach the knife blade. For example, Hood references at Col. 10, lines 45-53, the desirability of maintaining ultrasonic propagation along the longitudinal axis of the instrument without deflection. There is no teaching or suggestion in Alexander that the disclosed blade has capacity to propagate ultrasonic energy. Therefore, one skilled in the art would have no expectation that a blade constructed according to Alexander would be applicable or effective in an ultrasonic surgical knife.

Therefore, in light of the forgoing, Applicant respectfully submits that the obviousness rejection has been obviated, and kindly requests that it be reconsidered and withdrawn. Applicant further submits that all claims recite patentable subject matter. An early indication of allowability is kindly requested. If the Examiner has any reservation in allowing the claims, and believes that a telephone interview would advance prosecution, he is kindly requested to telephone the undersigned at his earliest convenience.

Respectfully submitted,



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